

1	102	85.7	16	10	US-09-897-465-2	Sequence 2, Appl
2	102	85.7	17	10	US-09-897-465-3	Sequence 3, Appl
3	82	68.9	16	10	US-09-897-465-4	Sequence 4, Appl
4	57.5	48.3	320	9	US-09-911-496-22	Sequence 22, Appl
5	57.5	48.3	320	9	US-09-911-496-55	Sequence 55, Appl
6	57.5	48.3	320	10	US-09-874-923-22	Sequence 22, Appl
7	57.5	48.3	320	10	US-09-874-923-55	Sequence 55, Appl
8	57.5	48.3	709	9	US-09-911-496-121	Sequence 121, App
9	57.5	48.3	709	10	US-09-874-923-121	Sequence 121, App
10	51	42.9	16	10	US-09-897-465-5	Sequence 5, Appl
11	51	42.9	17	10	US-09-897-465-6	Sequence 6, Appl
12	50	42.0	16	10	US-09-897-465-8	Sequence 8, Appl
13	50	42.0	16	10	US-09-897-465-10	Sequence 10, Appl
14	50	42.0	16	10	US-09-897-465-12	Sequence 12, Appl
15	49	41.2	73	10	US-09-764-877-1910	Sequence 1910, App
16	48	40.3	621	10	US-09-925-601-1416	Sequence 1416, App
17	48	40.3	621	10	US-09-996-620-6	Sequence 6, Appl
18	46.5	39.1	728	10	US-09-908-322-2	Sequence 2, Appl
19	46	38.7	75	9	US-10-138-516-6	Sequence 6, Appl

APPLICANT: McIntosh, J. Michael  
APPLICANT: Yoshikami, Doju  
APPLICANT: Cartier, G. Edward  
APPLICANT: Luo, Siqin  
APPLICANT: University of Utah Research Foundation  
TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides  
FILE REFERENCE: Uses of Alpha-Conotoxins  
CURRENT APPLICATION NUMBER: US/09/897,465  
CURRENT FILING DATE: 2001-07-03  
PRIOR APPLICATION NUMBER: US 60/080,588  
PRIOR FILING DATE: 1998-04-03  
PRIOR APPLICATION NUMBER: US 60/070,153  
PRIOR FILING DATE: 1997-12-31  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 3  
LENGTH: 17  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence:Tyr derivative  
OTHER INFORMATION: of C. magus MII  
US-09-897-465-3

Query Match 85.7%; Score 102; DB 10; Length 17;  
Best Local Similarity 100.0%; Pred. No. 7.7e-07;  
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GCCSNPVCHEHSNLC 16  
|||||  
Db 2 GCCSNPVCHEHSNLC 17

## RESULT 3

US-09-897-465-4  
Sequence 4, Application US/09897465  
Patent No. US2002022715A1  
GENERAL INFORMATION:  
APPLICANT: Olivera, Baldomero M.  
APPLICANT: McIntosh, J. Michael  
APPLICANT: Yoshikami, Doju  
APPLICANT: Cartier, G. Edward  
APPLICANT: Luo, Siqin  
APPLICANT: University of Utah Research Foundation  
TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides  
FILE REFERENCE: Uses of Alpha-Conotoxins  
CURRENT APPLICATION NUMBER: US/09/897,465  
CURRENT FILING DATE: 2001-07-03  
PRIOR APPLICATION NUMBER: US 60/080,588  
PRIOR FILING DATE: 1998-04-03  
PRIOR APPLICATION NUMBER: US 60/070,153  
PRIOR FILING DATE: 1997-12-31  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 4  
LENGTH: 16  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence:FAT derivative  
OTHER INFORMATION: of C. magus MII  
US-09-897-465-4

Query Match 68.9%; Score 82; DB 10; Length 16;  
Best Local Similarity 81.2%; Pred. No. 0.00021;  
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GCCSNPVCHEHSNLC 16  
|||||  
Db 1 GCCSNPVCFATHSNLC 16

## RESULT 4

US-09-991-496-22  
Sequence 22, Application US/09991496  
Patent No. US20020169285A1  
GENERAL INFORMATION:  
APPLICANT: Reed, Steven G.  
APPLICANT: Campos-Neto, Antonio  
APPLICANT: Webb, John R.  
APPLICANT: Dillon, Davin C.  
APPLICANT: Skeiky, Yasir A.W.  
APPLICANT: Bhatia, Ajay  
APPLICANT: Coler, Rhea  
APPLICANT: Probst, Peter  
APPLICANT: Brannon, Mark  
TITLE OF INVENTION: LEISHMANIA ANTIGENS FOR USE IN THE  
TITLE OF INVENTION: THERAPY AND DIAGNOSIS OF LEISHMANIASIS  
FILE REFERENCE: 210121.420C9  
CURRENT APPLICATION NUMBER: US/09/991,496  
CURRENT FILING DATE: 2001-11-20  
NUMBER OF SEQ ID NOS: 137  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 22  
LENGTH: 320  
TYPE: PRT  
ORGANISM: Leishmania major  
US-09-991-496-22

Query Match 48.3%; Score 57.5; DB 9; Length 320;  
Best Local Similarity 50.0%; Pred. No. 3;  
Matches 10; Conservative 2; Mismatches 5; Indels 3; Gaps 1;

Qy 3 CSNPV---CHLEHSNLC 19  
||:| | :||| | | |  
Db 214 CSSPTQPCVEHCNTCVNG 233

## RESULT 5

US-09-991-496-55  
Sequence 55, Application US/09991496  
Patent No. US20020169285A1  
GENERAL INFORMATION:  
APPLICANT: Reed, Steven G.  
APPLICANT: Campos-Neto, Antonio  
APPLICANT: Webb, John R.  
APPLICANT: Dillon, Davin C.  
APPLICANT: Skeiky, Yasir A.W.  
APPLICANT: Bhatia, Ajay  
APPLICANT: Coler, Rhea  
APPLICANT: Probst, Peter  
APPLICANT: Brannon, Mark  
TITLE OF INVENTION: LEISHMANIA ANTIGENS FOR USE IN THE  
TITLE OF INVENTION: THERAPY AND DIAGNOSIS OF LEISHMANIASIS  
FILE REFERENCE: 210121.420C9  
CURRENT APPLICATION NUMBER: US/09/991,496  
CURRENT FILING DATE: 2001-11-20  
NUMBER OF SEQ ID NOS: 137  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 55  
LENGTH: 320  
TYPE: PRT  
ORGANISM: Leishmania major  
US-09-991-496-55

Query Match 48.3%; Score 57.5; DB 9; Length 320;  
Best Local Similarity 50.0%; Pred. No. 3;  
Matches 10; Conservative 2; Mismatches 5; Indels 3; Gaps 1;

Qy 3 CSNPV---CHLEHSNLC 19  
||:| | :||| | | |  
Db 214 CSSPTQPCVEHCNTCVNG 233

## RESULT 6

US-09-874-923-22

; Sequence 22, Application US/09874923  
; Patent No. US20020081320A1  
; GENERAL INFORMATION:  
; APPLICANT: Reed, Steven G.  
; APPLICANT: Campos-Neto, Antonio  
; APPLICANT: Webb, John R.  
; APPLICANT: Dillon, Davin C.  
; APPLICANT: Skeiky, Yasir A.W.  
; APPLICANT: Bhatia, Ajay  
; APPLICANT: Coler, Rhea  
; APPLICANT: Probst, Peter  
; APPLICANT: Brannon, Mark  
; TITLE OF INVENTION: LEISHMANIA ANTIGENS FOR USE IN THE  
; TITLE OF INVENTION: THERAPY AND DIAGNOSIS OF LEISHMANIASIS  
; FILE REFERENCE: 210121.420C8  
; CURRENT APPLICATION NUMBER: US/09/874,923  
; CURRENT FILING DATE: 2001-06-04  
; NUMBER OF SEQ ID NOS: 122  
; SOFTWARE: FastSEQ for Windows Version 4.0  
; SEQ ID NO 22  
; LENGTH: 320  
; TYPE: PRT  
; ORGANISM: Leishmania major  
; US-09-874-923-22

Query Match 48.3%; Score 57.5; DB 10; Length 320;  
Best Local Similarity 50.0%; Pred. No. 3;  
Matches 10; Conservative 2; Mismatches 5; Indels 3; Gaps 1;

QY 3 CSNPV---CHLEHSLNLTNG 19  
||:| | :|| | ||  
Db 214 CSSPTTQPCVEHCNTCVNG 233

## RESULT 7

US-09-874-923-55  
; Sequence 55, Application US/09874923  
; Patent No. US20020081320A1  
; GENERAL INFORMATION:  
; APPLICANT: Reed, Steven G.  
; APPLICANT: Campos-Neto, Antonio  
; APPLICANT: Webb, John R.  
; APPLICANT: Dillon, Davin C.  
; APPLICANT: Skeiky, Yasir A.W.  
; APPLICANT: Bhatia, Ajay  
; APPLICANT: Coler, Rhea  
; APPLICANT: Probst, Peter  
; APPLICANT: Brannon, Mark  
; TITLE OF INVENTION: LEISHMANIA ANTIGENS FOR USE IN THE  
; TITLE OF INVENTION: THERAPY AND DIAGNOSIS OF LEISHMANIASIS  
; FILE REFERENCE: 210121.420C8  
; CURRENT APPLICATION NUMBER: US/09/874,923  
; CURRENT FILING DATE: 2001-06-04  
; NUMBER OF SEQ ID NOS: 122  
; SOFTWARE: FastSEQ for Windows Version 4.0  
; SEQ ID NO 55  
; LENGTH: 320  
; TYPE: PRT  
; ORGANISM: Leishmania major  
; US-09-874-923-55

Query Match 48.3%; Score 57.5; DB 10; Length 320;  
Best Local Similarity 50.0%; Pred. No. 3;  
Matches 10; Conservative 2; Mismatches 5; Indels 3; Gaps 1;

QY 3 CSNPV---CHLEHSLNLTNG 19  
||:| | :|| | ||  
Db 214 CSSPTTQPCVEHCNTCVNG 233

## RESULT 8

US-09-991-496-121  
; Sequence 121, Application US/09991496

; Patent No. US20020169285A1  
; GENERAL INFORMATION:  
; APPLICANT: Reed, Steven G.  
; APPLICANT: Campos-Neto, Antonio  
; APPLICANT: Webb, John R.  
; APPLICANT: Dillon, Davin C.  
; APPLICANT: Skeiky, Yasir A.W.  
; APPLICANT: Bhatia, Ajay  
; APPLICANT: Coler, Rhea  
; APPLICANT: Probst, Peter  
; APPLICANT: Brannon, Mark  
; TITLE OF INVENTION: LEISHMANIA ANTIGENS FOR USE IN THE  
; TITLE OF INVENTION: THERAPY AND DIAGNOSIS OF LEISHMANIASIS  
; FILE REFERENCE: 210121.420C9  
; CURRENT APPLICATION NUMBER: US/09/991,496  
; CURRENT FILING DATE: 2001-11-20  
; NUMBER OF SEQ ID NOS: 137  
; SOFTWARE: FastSEQ for Windows Version 4.0  
; SEQ ID NO 121  
; LENGTH: 709  
; TYPE: PRT  
; ORGANISM: Leishmania major and chagasi  
; US-09-991-496-121

Query Match 48.3%; Score 57.5; DB 9; Length 709;  
Best Local Similarity 50.0%; Pred. No. 5.9;  
Matches 10; Conservative 2; Mismatches 5; Indels 3; Gaps 1;

QY 3 CSNPV---CHLEHSLNLTNG 19  
||:| | :|| | ||  
Db 603 CSSPTTQPCVEHCNTCVNG 622

## RESULT 9

US-09-874-923-121  
; Sequence 121, Application US/09874923  
; Patent No. US20020081320A1  
; GENERAL INFORMATION:  
; APPLICANT: Reed, Steven G.  
; APPLICANT: Campos-Neto, Antonio  
; APPLICANT: Webb, John R.  
; APPLICANT: Dillon, Davin C.  
; APPLICANT: Skeiky, Yasir A.W.  
; APPLICANT: Bhatia, Ajay  
; APPLICANT: Coler, Rhea  
; APPLICANT: Probst, Peter  
; APPLICANT: Brannon, Mark  
; TITLE OF INVENTION: LEISHMANIA ANTIGENS FOR USE IN THE  
; TITLE OF INVENTION: THERAPY AND DIAGNOSIS OF LEISHMANIASIS  
; FILE REFERENCE: 210121.420C8  
; CURRENT APPLICATION NUMBER: US/09/874,923  
; CURRENT FILING DATE: 2001-06-04  
; NUMBER OF SEQ ID NOS: 122  
; SOFTWARE: FastSEQ for Windows Version 4.0  
; SEQ ID NO 121  
; LENGTH: 709  
; TYPE: PRT  
; ORGANISM: Leishmania major and chagasi  
; US-09-874-923-121

Query Match 48.3%; Score 57.5; DB 10; Length 709;  
Best Local Similarity 50.0%; Pred. No. 5.9;  
Matches 10; Conservative 2; Mismatches 5; Indels 3; Gaps 1;

QY 3 CSNPV---CHLEHSLNLTNG 19  
||:| | :|| | ||  
Db 603 CSSPTTQPCVEHCNTCVNG 622

## RESULT 10

US-09-897-465-5  
; Sequence 5, Application US/09897465  
; Patent No. US20020022715A1

```
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
; FILE REFERENCE: Uses of Alpha-Conotoxins
; CURRENT APPLICATION NUMBER: US/09/897,465
; CURRENT FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 60/080,588
; PRIOR FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: US 60/070,153
; PRIOR FILING DATE: 1997-12-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Conus aulicus
US-09-897-465-5

Query Match 42.9%; Score 51; DB 10; Length 16;
Best Local Similarity 50.0%; Pred. No. 1.4;
Matches 8; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 1 GCCSNPVCCHLSNLC 16
| | | | | | | | | | | | | | | |
Db 1 GCCSYPPCFATNSDYC 16

RESULT 11
US-09-897-465-6
; Sequence 6, Application US/09897465
; Patent No. US20020022715A1
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
; FILE REFERENCE: Uses of Alpha-Conotoxins
; CURRENT APPLICATION NUMBER: US/09/897,465
; CURRENT FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 60/080,588
; PRIOR FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: US 60/070,153
; PRIOR FILING DATE: 1997-12-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 17
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Tyr derivative
US-09-897-465-6

Query Match 42.9%; Score 51; DB 10; Length 17;
Best Local Similarity 50.0%; Pred. No. 1.5;
Matches 8; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 1 GCCSNPVCCHLSNLC 16
| | | | | | | | | | | | | | | |
Db 2 GCCSYPPCFATNSDYC 17

RESULT 12
US-09-897-465-8
; Sequence 8, Application US/09897465
; Patent No. US20020022715A1
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
; FILE REFERENCE: Uses of Alpha-Conotoxins
; CURRENT APPLICATION NUMBER: US/09/897,465
; CURRENT FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 60/080,588
; PRIOR FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: US 60/070,153
; PRIOR FILING DATE: 1997-12-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 8
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Conus aulicus
US-09-897-465-8

Query Match 42.0%; Score 50; DB 10; Length 16;
Best Local Similarity 50.0%; Pred. No. 1.9;
Matches 8; Conservative 1; Mismatches 7; Indels 0; Gaps 0;

QY 1 GCCSNPVCCHLSNLC 16
| | | | | | | | | | | | | | | |
Db 1 GCCSYPPCFATNSGYC 16

RESULT 13
US-09-897-465-10
; Sequence 10, Application US/09897465
; Patent No. US20020022715A1
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Yoshikami, Doju
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Siqin
; APPLICANT: University of Utah Research Foundation
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
; FILE REFERENCE: Uses of Alpha-Conotoxins
; CURRENT APPLICATION NUMBER: US/09/897,465
; CURRENT FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: US 60/080,588
; PRIOR FILING DATE: 1998-04-03
; PRIOR APPLICATION NUMBER: US 60/070,153
; PRIOR FILING DATE: 1997-12-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:AlOL derivative
US-09-897-465-10

Query Match 42.0%; Score 50; DB 10; Length 16;
Best Local Similarity 50.0%; Pred. No. 1.9;
Matches 8; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 1 GCCSNPVCCHLSNLC 16
| | | | | | | | | | | | | | | |
Db 1 GCCSLPPCALNPPDYC 16
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## RESULT 14

US-09-897-465-12  
; Sequence 12, Application US/09897465  
; Patent No. US20020022715A1  
; GENERAL INFORMATION:  
; APPLICANT: Olivera, Baldomero M.  
; APPLICANT: McIntosh, J. Michael  
; APPLICANT: Yoshikami, Doju  
; APPLICANT: Cartier, G. Edward  
; APPLICANT: Luo, Sign  
; APPLICANT: University of Utah Research Foundation  
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides  
; FILE REFERENCE: Uses of Alpha-Conotoxins  
; CURRENT APPLICATION NUMBER: US/09/897,465  
; CURRENT FILING DATE: 2001-07-03  
; PRIOR APPLICATION NUMBER: US 60/080,588  
; PRIOR FILING DATE: 1998-04-03  
; PRIOR APPLICATION NUMBER: US 60/070,153  
; PRIOR FILING DATE: 1997-12-31  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 12  
; LENGTH: 16  
; TYPE: PRT  
; ORGANISM: Conus purpurascens  
US-09-897-465-12

Query Match 42.0%; Score 50; DB 10; Length 16;

Best Local Similarity 50.0%; Pred. No. 1.9;

Matches 8; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 1 GCCSNPVCHEHSNLC 16

||||| : : : |

Db 1 GCCSLPPCALSNPDYC 16

## RESULT 15

US-09-764-877-1910  
; Sequence 1910, Application US/09764877  
; Patent No. US20020147140A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosen et al.  
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
; FILE REFERENCE: PC005  
; CURRENT APPLICATION NUMBER: US/09/764,877  
; CURRENT FILING DATE: 2001-01-17  
; Prior application data removed - refer to PALM or file wrapper  
; NUMBER OF SEQ ID NOS: 4031  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 1910  
; LENGTH: 73  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-764-877-1910

Query Match 41.2%; Score 49; DB 10; Length 73;

Best Local Similarity 53.8%; Pred. No. 9.4;

Matches 7; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

QY 2 CCSNPVCHEHSN 14

||| :| :| :|

Db 49 CCGPICKLKNSN 61

Search completed: March 17, 2003, 07:29:19

Job time : 6.67176 secs

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